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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,196	12/18/2001	Antonius Hendricus Maria Holtslag	NL000736	3300

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

LEWIS, DAVID LEE

ART UNIT PAPER NUMBER

2673

DATE MAILED: 03/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,196

Applicant(s)

HOLTSLAG ET AL.

Examiner

David L Lewis

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasahara et al. (2002/0036650 A1).**
2. **As in claim 1, Kasahara et al. teaches of a matrix display device, figure 9, comprising a plurality of light emitting elements, figure 9 item 24, drive means, figure 9 items 20, 22, 34, arranged for sub-field addressing of the light emitting elements and characterized by determining means, for determining a display load of the device, figure 9 item 26 and 28, and control means, for dynamically varying a number of sub-fields available for display of an image responsive to said determined display load being below a threshold value, figure 9 item 30. As shown in figure 9 of Kasahara et al., they teach of a display apparatus capable of adjusting the subfield number in accordance with brightness, which is equivalent to adjusting the subfield number in accordance with load. The**

applicant can further look to paragraphs 22, 35, 107, 120, and 121 of Kasahara et al. The subfield number Z is adjusted in accordance with load/brightness. The brightness or load has a corresponding threshold value which determines the appropriate subfield number to achieve proper balance. An image characteristic determining device figure 9 item 30 receives the average Lav and peak level Lpk, and decides the subfield number Z.

3. **As in claim 2, Kasahara et al. teaches of** wherein the drive means comprises a subfield converter, **figure 9 item 34**, and a matrix display drive means, coupled to the subfield converter, **figure 9 items 20 and 22**; both the subfield converter and the determining means are receiving an incoming video signal, **figure 9 item 2**; the determining means comprises means for providing information about the display load to the control means, **figure 9 item 26 and 28**; the control means is coupled to the subfield converter for dynamically varying the number of subfields available to display the image, **figure 9 item 30**; and the matrix display drive means are coupled to the light emitting elements, **figure 9 items 20, 22, and 24**.
4. **As in claim 3, Kasahara et al. teaches of a** comprising means for applying partial line doubling and being coupled to the control means to receive information related to the display load and coupled to the matrix display drive means, to apply partial line doubling responsive to said display load being determined to be below a threshold value, **figure 9 item 18, figure 20 item 18**.

As in claim 4, Kasahara et al. teaches of comprising means for applying dithering and being coupled to the control means to receive information related to the display load and coupled to the matrix display drive means for applying dithering, responsive to said display load being determined to be below a threshold value, **figure 9 item 18, figure 20 item 18. As in claim 5, Kasahara et al. teaches of** and including means for applying partial line doubling responsive to the said display load being determined to be below a threshold value, **figure 9 item 18, figure 20 item 18. As in claim 6, Kasahara et al. teaches of a;** and including means for applying dithering, responsive to the said display load being determined to be below a threshold value, **figure 9 item 18, figure 20 item 18. As in claim 7, Kasahara et al. teaches of a,** and determining means comprising processor means for continuously monitoring the display load, **figure 9 items 26 and 28. As in claims 8-13, Kasahara et al. teaches of said control means, figure 8 item 30. As in claim 15, Kasahara et al. teaches of a display apparatus arranged for receiving a video signal and for processing the signal so as to display an image determined by the signal, the image determining a display load within the apparatus, and the apparatus having means for receiving a power supply having regard to the display load, figure 9 item 54.**

5. **As in claim 14, Kasahara et al. teaches of a method of controlling light output from a matrix display device employing sub-field addressing and comprising**

determining the display load of the device, **figure 9 item 26 and 28** (brightness detector), and characterized by the steps dynamically varying the number of sub-fields available for display of an image responsive to said display load being determined to below a threshold value, **figure 9 item 30 and 34, page 2 paragraphs 28-30.**

Response to Arguments

6. Applicant's arguments filed 1/9/2004 have been fully considered but they are not persuasive. Applicant argues independent claim 1 is patentable over Kasahara et al. because they do not teach or suggest the control means for dynamically varying a number of sub-fields available for display of an image responsive to whether a display load has been determined. As shown in figure 9 of Kasahara et al., they teach of a display apparatus capable of adjusting the subfield number in accordance with brightness, which is equivalent to adjusting the subfield number in accordance with load. The applicant can further look to paragraphs 22, 35, 107, 120, and 121 of Kasahara et al. The subfield number Z is adjusted in accordance with load/brightness. The brightness or load has a corresponding threshold value which determines the appropriate subfield number to achieve proper balance. An image characteristic determining device figure 9 item 30 receives the average L_{av} and peak level L_{pk} , and decides the subfield number Z. Rejection maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L Lewis whose telephone number is 703 306-3026. The examiner can normally be reached on M, T, TH, F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

March 21, 2004



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600